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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,286

08/18/2003

Masahiro Inukai

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7590

06/29/2005

NIXON PEABODY, LLP

401 9TH STREET, NW

SUITE 900

WASHINGTON, DC 20004-2128

EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/642,286

Applicant(s)

INUKAI ET AL.

Examiner

Marcus Charles

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12-8-03 & 1-21-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the first action relating application serial number 10/642,286 filed 08/18/2003.

Claims 1-16 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the uppermost end of the indent is located at the same level of the upper inserting/receiving part, as in claims 5 and 14, and "the downward recess" as in claims 10-15, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it is not proper to include legal terms and phrases in the specification. Therefore, the term "said" in page 4, lines 12 and 14 should be replaced by --the--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear as to what "Heavy duty" means, and what makes the belt a heavy-duty belt. The phrase "Heavy duty" has no patentable weight. Therefore, it is suggested to delete the phrase "Heavy duty" from the claims and title.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-16, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkawa et al. in view of Van Liempd et al. (6,857,980). Ohkawa et al. disclose the claimed invention including a plurality of blocks (7) each having a fitting part (8); the blocks being formed of reinforcement part (12) surrounded by the resin part (16); and a tension member (1) fitting in the fitting part via upper receiving/inserting parts mating with lower receiving inserting [arts of the tension member; the resin part of the block constituting the contact part and the fitting part. Ohkawa et al fails to disclose the back of the fitting part is formed with an indent which is an upwardly recessing port of the resin located between the upper inserting/receiving part and the inner most abutment surface. Van Liempd et al. disclose a v-belt comprising a plurality of blocks (20), each block has a fitting part (21) having an end surface a formed with an indent upward recessing portion (40) located between the upper receiving part and an innermost abutment (38) in order to reduce weight and to reduce constructional stresses and heat dissipation during operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Ohkawa et al. to include the indent recess portion in view of Van Liempd et al. in order

to reduce weight and to reduce constructional stresses and heat dissipation during operation.

In claims 2 and 3, Van Liempd et al. show the indent and the back surface are connected by a curve and the indent has an arcuate shape.

Note in claim 4, Ohkawa et al. shows both front and rear surfaces of the insert part of the blocks are chamfered in an arcuate cross-section.

In claims 5 and 6, note Van Liempd et al. shows in fig. 7, the uppermost portion of the indent is located above the upper end of the fitting part and an edge between the upper receiving part and the abutment is located in the indent.

In claims 7 and 16, Van Liempd et al. show the abutment surface (38) has an angle (a) with the vertical plane (see a dotted line I) of the belt and the contact surface (23) has an angle $b < 90^{\circ}$. Note col. 6, line 39-40, Van Liempd et al. discloses b can be smaller than 85° , which means b can be greater than 5° and in col. 6, lines 10-11, the angle (a) is 11° . Therefore, it is possible that relationship $b - 3 < a < b + 3$.

In claims 8 and 9, Ohkawa et al. disclose the claimed invention in fig. 4. (see the angles (α_1 and α_2)).

In claim 10, see the downward recess (37) of Van Liempd et al. in figs 5 and 6.

In claims 11 and 12, Van Liempd et al. shows the indent and the inner abutment are connected by a curve and the indent is arcuate.

In claims 13-15, Ohkawa et al. Van Liempd et al. disclose the claimed invention as described above.


Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP(2000-104796), JP (11-826637), JP (2000-120799), JP (2001-3994), JP (2000-310294), Inukai et al (4,813,920, Nonaka et al. (6,283,882), Brandsma et al. (6,464,606), Serkh et al. (6,500,086) disclose a v-belt for a cvt, each belt comprises a plurality of blocks.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marcus Charles
Primary Examiner
Art Unit 3682
June 19, 2005